REMARKS

Claims 1-12 have been amended. New claims 13-20 have been added. The new claims depend from claim 3 instead of claim 1, and parallel claims which depend from claim 1. These claims have been added since the application as originally filed included multiple dependent claims.

Claims 1-12 are similar in scope to those which have received a grant in the European Patent Office from the application on which this application claims priority and taking into account various issues raised by the objections and rejection under 35 U.S.C. 112, second paragraph. Claims 1-12 should now satisfy all objections and be in compliance with the requirements of 35 U.S.C. 112, second paragraph. Specifically,

in claim 1, the "dry method" has been presented as the "fibrous materials being supplied in a stream of air" as surmised by the Examiner on page 3 of the office action

in claims 1 and 3, the fibrous materials have been identified as fibrous materials consisting of wood fibers or other lignocellulosic materials or particles, in accordance with the Examiner's suggestions on page 2 of the office action

in claims 1 and 3, and throughout the dependent claims, the applicants have dropped the notation "water glass" and instead use the notation "inorganic materials" or "inorganic substances" where such materials or substances are based on potassium and/or sodium silicates (as set forth in the specification and claims as originally filed)

in claim 1, portions of original claim 8 have been substantially included, and, based on the Examiner's comments on page 4 of the office action, claim 1 has been amended to require that the inorganic materials are added either before or during a defibering process of the raw materials from which the fibrous materials are derived or into a transport element of a defibering apparatus–claim 8 has been amended to more narrowly define a cooking apparatus and a refiner

claim 6 has been amended to eliminate the narrower range and the use of the identifier "preferably"–dependent claims have been added to recite the narrower range (similar dependent claims have been made to depend from claim 3)

Claim 7 has been amended to correct for antecedent basis

Claim 9 has been amended to recite the additional constituents that may be added in combination with the inorganic materials (e.g., the water glass)—these consituents are particularly described in paragraph [0028]–it being understood that a water glass adhesive is a water glass that includes these additional constituents

Claim10 has been amended to include the word "or".

Claims 1-10 have been rejected as being obvious over WO 92/04169 to Ljungbo in view of DE 1127270 to Gath and U.S. Patent Publication 2002/01000996 to Moyes. Claims 11 and 12 have been rejected as being obvious over the Ljungbo/Gath/Moyes combination further in view of DE 19500653 to Nurnburger. These rejections are traversed.

WO 92/04169 to Ljungbo is silent about the mixing temperature at which water glass (i.e., inorganic materials) is added to the fiber materials. Furthermore, nothing is said about the density to which the mixture is compressed and that at least a part of the water glass is fed directly into the cooking process in which the fiber materials are disintegrated or into a transport element of a refiner which defibers chips for the production of the fibrous materials. In Ljungbo, water glass is added in the diffuser (example 1) or in a mixer (example 2), but not during a cooking process or during transportation to a refiner. According to Ljungbo, the water glass is added always to the fibers but not to the chips, i.e., not before defibering the chips.

DE 1127297 to Gath is related to a method for the production of moldings using alkali silicates in which the alkali silicate partices are deformed in a conventional extrusion molding of an injection molding process. The molding takes place at a temperature of 100-400°C, a heat treatment above 200°C is performed subsequent to the molding. Wood fibers can be added to the alkali silicates. Gath does not disclose a dry method with the claimed mixing temperatures, and does not disclose the forming of a fiber mat in a closed press at a temperature above 80°C. Especially, Gath does not disclose that at least a part of the water glass is fed directly into a cooking process disintegrating the fibrous materials or into a transport element of the refiner which defibers chips for the production of fibrous materials.

Moyes has been relied for its showing of compressing a material to achieve

a specified density. Moyes does not make up for the deficiencies of Ljungbo and Gath. For example, a combination of the references would not contemplate the temperature range of claim 1, the curing at 80°C specified in claims 1 and 3, the use of an air stream or a water vapor atmosphere as specified in claims 1 and 3, or having at least a part of the water glass fed directly into a cooking process disintegrating the fibrous materials or into a transport element of the refiner which defibers chips for the production of fibrous materials. Similarly, Nurnburger has been relied upon as showing the use of carbon dioxide to harden materials. However, Nurnburger does not show or suggest the temperature range of claim 1, the curing at 80°C specified in claims 1 and 3, the use of an air stream or a water vapor atmosphere as specified in claims 1 and 3, or having at least a part of the water glass fed directly into a cooking process disintegrating the fibrous materials or into a transport element of the refiner which defibers chips for the production of fibrous materials

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-20 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

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